

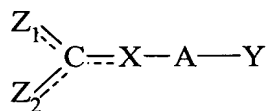
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-85. (Cancelled)

86. (Currently Amended) A method for treating Parkinson's disease in a subject, comprising:

administering to a subject a therapeutically effective amount of a combination of creatine, a creatine phosphate or a creatine compound and a neuroprotective agent, such that Parkinson's disease in said subject is treated, wherein said neuroprotective agent is selected from the group consisting of inhibitors of glutamate excitotoxicity, 2,3 dimethoxy-5-methyl-6-decaprenyl benoquinone, nicotinamide, spin traps, growth factors, nitric oxide synthase inhibitors, cyclooxygenase 2 inhibitors, aspirin, ~~ICE inhibitors, neuroimmunophilis,~~ N-acetylcysteine, antioxidants, lipoic acid, ~~cofactors,~~ riboflavin, and CoQ10, wherein said creatine compound has the formula:



and pharmaceutically acceptable salts thereof, wherein:

- a) Y is -CO₂H;
- b) A is selected from the group consisting of: C, CH, C₁-C₅alkyl, C₂-C₅alkenyl, C₂-C₅alkynyl, and C₁-C₅ alkoyl chain, each having 0-2 substituents which are selected independently from the group consisting of:
 - 1) K, where K is selected from the group consisting of: C₁ -C₆ straight alkyl, C₂-C₆ straight alkenyl, C₁-C₆ straight alkoyl, C₃-C₆ branched alkyl, C₃-C₆ branched alkenyl, and C₄-C₆ branched alkoyl, K having 0-2 substituents independently selected from the group consisting of: bromo, chloro, epoxy and acetoxy;
 - 2) -NH-M, wherein M is selected from the group consisting of: hydrogen, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₁-C₄ alkoyl, C₃-C₄ branched alkyl, C₃-C₄ branched alkenyl, and C₄ branched alkoyl;

c) X is NR_1 , wherein R_1 is selected from the group consisting of:

1) hydrogen;

2) K where K is selected from the group consisting of: C_1 - C_6 straight alkyl, C_2 - C_6 straight alkenyl, C_1 - C_6 straight alkoyl, C_3 - C_6 branched alkyl, C_3 - C_6 branched alkenyl, and C_4 - C_6 branched alkoyl, K having 0-2 substituents independently selected from the group consisting of: bromo, chloro, epoxy and acetoxy;

d) Z_1 and Z_2 are chosen independently from the group consisting of: $-\text{NHR}_2$, wherein R_2 is selected from the group consisting of:

1) hydrogen;

2) K, where K is selected from the group consisting of: C_1 - C_6 straight alkyl; C_2 - C_6 straight alkenyl, C_1 - C_6 straight alkoyl, C_3 - C_6 branched alkyl, C_3 - C_6 branched alkenyl, and C_4 - C_6 branched alkoyl, K having 0-2 substituents independently selected from the group consisting of: bromo, chloro, epoxy and acetoxy;

3 a C_4 - C_8 α -amino-carboxylic acid attached via the ω -carbon; and

4 B, wherein B is selected from the group consisting of: $-\text{CO}_2\text{H}$, $-\text{NHOH}$, $-\text{SO}_3\text{H}$, and $-\text{NO}_2$, ~~wherein J is selected from the group consisting of: hydrogen, C_1 - C_6 straight alkyl, C_3 - C_6 branched alkyl, C_2 - C_6 alkenyl, C_3 - C_6 branched alkenyl, and aryl,~~ wherein B is optionally connected to the nitrogen via a linker selected from the group consisting of: C_1 - C_2 alkyl, C_2 alkenyl, and C_1 - C_2 alkoyl.

87-90. (Cancelled)

91. (Previously Presented) The method of claim 86 or 133, wherein said neuroprotective agent is a spin trap.

92. (Cancelled)

93. **(Currently Amended)** The method of claim 86 or 133, wherein said neuroprotective agent is ~~a cofactor for normal cellular metabolism~~ carnitine.

94. **(Cancelled)**

95. **(Previously Presented)** The method of claim 86 or 133, wherein said neuroprotective agent is an antioxidant.

96. **(Cancelled)**

97. **(Cancelled)**

98. **(Previously Presented)** The method of claim 86 or 133, wherein said neuroprotective agent is riboflavin.

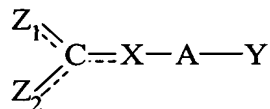
99. **(Previously Presented)** The method of claim 86 or 133, further comprising administering at least one additional neuroprotective agent or creatine compound.

100. **(Previously Presented)** The method of claim 86 or 133, wherein said creatine compound is creatine.

101-107. **(Cancelled)**

108. **(Currently Amended)** A method for treating Huntington's disease in a subject, comprising:

administering to a subject a therapeutically effective amount of a combination of creatine, a creatine phosphate or a creatine compound and a neuroprotective agent, such that Huntington's disease is treated, wherein said neuroprotective agent is selected from the group consisting of inhibitors of glutamate excitotoxicity, 2,3 dimethoxy-5-methyl-6-decaprenyl benoquinone, nicotinamide, spin traps, growth factors, nitric oxide synthase inhibitors, cyclooxygenase 2 inhibitors, aspirin, ~~ICE inhibitors, neuroimmunophilis~~, N-acetylcysteine, antioxidants, lipoic acid, ~~cofactors~~, riboflavin, and CoQ10, wherein said creatine compound has the formula:



and pharmaceutically acceptable salts thereof, wherein:

- a) $-\text{CO}_2\text{H}$;
- b) A is selected from the group consisting of: C, CH, $\text{C}_1\text{-C}_5$ alkyl, $\text{C}_2\text{-C}_5$ alkenyl, $\text{C}_2\text{-C}_5$ alkynyl, and $\text{C}_1\text{-C}_5$ alkoyl chain, each having 0-2 substituents which are selected independently from the group consisting of:
- 1) K, where K is selected from the group consisting of: $\text{C}_1\text{-C}_6$ straight alkyl, $\text{C}_2\text{-C}_6$ straight alkenyl, $\text{C}_1\text{-C}_6$ straight alkoyl, $\text{C}_3\text{-C}_6$ branched alkyl, $\text{C}_3\text{-C}_6$ branched alkenyl, and $\text{C}_4\text{-C}_6$ branched alkoyl, K having 0-2 substituents independently selected from the group consisting of: bromo, chloro, epoxy and acetoxy;
 - 2) $-\text{NH-M}$, wherein M is selected from the group consisting of: hydrogen, $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_2\text{-C}_4$ alkenyl, $\text{C}_1\text{-C}_4$ alkoyl, $\text{C}_3\text{-C}_4$ branched alkyl, $\text{C}_3\text{-C}_4$ branched alkenyl, and C_4 branched alkoyl;
- c) X is NR_1 , wherein R_1 is selected from the group consisting of:
- 1) hydrogen;
 - 2) K where K is selected from the group consisting of: $\text{C}_1\text{-C}_6$ straight alkyl, $\text{C}_2\text{-C}_6$ straight alkenyl, $\text{C}_1\text{-C}_6$ straight alkoyl, $\text{C}_3\text{-C}_6$ branched alkyl, $\text{C}_3\text{-C}_6$ branched alkenyl, and $\text{C}_4\text{-C}_6$ branched alkoyl, K having 0-2 substituents independently selected from the group consisting of: bromo, chloro, epoxy and acetoxy;
- d) Z_1 and Z_2 are chosen independently from the group consisting of: $-\text{NHR}_2$, wherein R_2 is selected from the group consisting of:
- 1) hydrogen;

2) K, where K is selected from the group consisting of: C₁-C₆ straight alkyl; C₂-C₆ straight alkenyl, C₁-C₆ straight alkoyl, C₃-C₆ branched alkyl, C₃-C₆ branched alkenyl, and C₄-C₆ branched alkoyl, K having 0-2 substituents independently selected from the group consisting of: bromo, chloro, epoxy and acetoxy;

3) a C₄-C₈ α-amino-carboxylic acid attached via the α-carbon; and

4) B, wherein B is selected from the group consisting of: -CO₂H, -NHOH, -SO₃H, and -NO₂, wherein J is selected from the group consisting of: hydrogen, ~~C₁-C₆ straight alkyl, C₃-C₆ branched alkyl, C₂-C₆ alkenyl, C₃-C₆ branched alkenyl, and aryl~~, wherein B is optionally connected to the nitrogen via a linker selected from the group consisting of: C₁-C₂ alkyl, C₂ alkenyl, and C₁-C₂ alkoyl.

109-112. (Cancelled)

113. (Previously Presented) The method of claim 108 or 134, wherein said neuroprotective agent is a spin trap.

114. (Cancelled)

115. (Currently Amended) The method of claim 108 or 134, wherein said neuroprotective agent cofactor is ~~a cofactor for normal cellular metabolism~~ carnitine.

116. (Cancelled)

117. (Previously Presented) The method of claim 108 or 134, wherein said neuroprotective agent is an antioxidant.

118. (Cancelled)

119. (Cancelled)

120. (Previously Presented) The method of claim 117, wherein said neuroprotective agent is riboflavin.

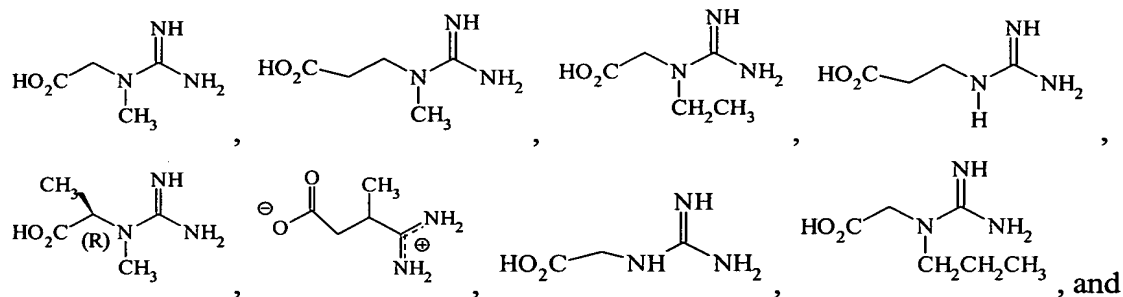
121. **(Previously Presented)** The method of claim 108 or 134, further comprising administering at least one additional neuroprotective agent or creatine compound.

122. **(Previously Presented)** The method of claim 108 or 134, wherein said creatine compound is creatine.

123-132. **(Cancelled)**

133. **(Currently Amended)** A method for treating Parkinson's disease in a subject, comprising:

administering to a subject a therapeutically effective amount of a combination of creatine, a creatine phosphate or a creatine compound and a neuroprotective agent, such that Parkinson's disease in said subject is treated, wherein said neuroprotective agent is selected from the group consisting of inhibitors of glutamate excitotoxicity, 2,3 dimethoxy-5-methyl-6-decaprenyl benoquinone, nicotinamide, spin traps, growth factors, nitric oxide synthase inhibitors, cyclooxygenase 2 inhibitors, aspirin, ~~ICE inhibitors, neuroimmunophilis~~, N-acetylcysteine, antioxidants, lipoic acid, ~~cofactors~~, riboflavin, and CoQ10, wherein said creatine compound is selected from the group consisting of:

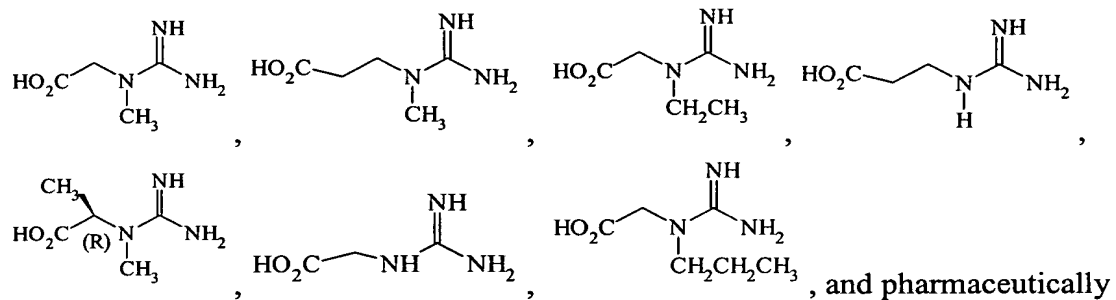


pharmaceutically acceptable salts thereof.

134. **(Currently Amended)** A method for treating Huntington's disease in a subject, comprising:

administering to a subject a therapeutically effective amount of a combination of creatine, a creatine phosphate or a creatine compound and a neuroprotective agent, such that Huntington's disease is treated, wherein said neuroprotective agent is selected from the group consisting of inhibitors of glutamate excitotoxicity, 2,3 dimethoxy-5-methyl-6-decaprenyl benoquinone, nicotinamide, spin traps, growth factors, nitric oxide synthase inhibitors, cyclooxygenase 2 inhibitors, aspirin, ~~ICE inhibitors, neuroimmunophilis~~, N-acetylcysteine,

antioxidants, lipoic acid, ~~cofactors~~, riboflavin, and CoQ10, wherein said creatine compound is selected from the group consisting of:



acceptable salts thereof.